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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

RPS920020082US1

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Application Number

10/064,269

Filed

June 27, 2002

First Named Inventor

Ruthie D. Lyle

Art Unit

2637

Examiner

Meek, Jacob M.

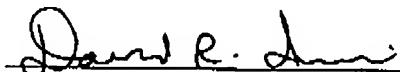
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

 applicant/inventor. assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/98) attorney or agent of record.Registration number 42,682

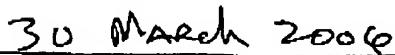
Signature

David R. Irvin

Typed or printed name

919-543-7810

Telephone number



Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below.

\*Total of \_\_\_\_\_ forms are submitted.

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MAR 30 2006

Application No. 10/064,269  
Response dated 29 March 2006

Pre-Appeal Brief Request for Review in reply to Advisory Action mailed 20 March 2006

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re: Patent Application of Lyle, Ruthie D., et al.

Serial Number: 10/064,269

Filed: 27 June 2002

Title: Insertion of Null Packets to Mitigate the Effects of Interference in  
Wireless Communications

Examiner: Jacob M. Meek

Unit: 2637

Attorney's Docket: RPS920020082US1

Mail Stop AF

Honorable Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

In response to the Advisory Action of 20 March 2006, applicant hereby files a Notice of Appeal  
(separate paper) and the present Pre-Appeal Brief Request for Review.

Applicant's independent claims 1, 12, and 17 now stand rejected (final) under 35 USC 103(a) in view of the single reference Souissi, et al (US 6,553,060).

Applicant respectfully holds that Examiner has not established a proper *prima facie* case for obviousness, as he has not cited any teaching of applicant's limitation "transmitting only null packets when hopping to a channel identified as experiencing interference," which is the second element of Applicant's independent claims 1, 12, and 17. Indeed, Examiner noted in his first Office Action (16 November 2005) that "Souissi is silent with respect to transmission of null packets on channels experiencing interference." Moreover, Examiner has not cited any other reference whatsoever that teaches the intentional transmission of null packets on channels experiencing interference.

Rather, as described in Examiner's Advisory Action of 20 March 2006 regarding his rejection under 35 U. S. C. 103(a), Examiner asserts that "the crux of the matter is this: . . . the transmission of null packets is not considered a positive limitation in that null packets do not initiate any further action versus not transmitting in the channel at all times and therefore is considered equivalent in terms of operational effect." This appears to Applicant to be a restatement of Examiner's earlier position (Office Action of 22 February 2006) that "In essence, Examiner holds that the transmission of a null packet is a superfluous addition as there is no indicated functionality gained by said transmission of null packets."

Applicant respectfully holds that this reasoning is incorrect.

Regarding the nature of the limitation, Applicant's limitation is clearly positive, in that applicant's invention requires packets of a particular kind to be transmitted (i.e., transmission is not withheld) on channels experiencing interference, whereas with Souissi's invention packets are not transmitted at all on channels experiencing interference. Thus it would seem to Applicant that Souissi's invention has negative limitations, not Applicant's, and that this is a distinguishing feature of Applicant's invention, making Applicant's invention diametrically different from Souissi's. Put more briefly, Applicant's invention intentionally sends packets of a particular kind on channels that experience interference, which is clearly a positive limitation, whereas Souissi's

invention intentionally withholds sending packets of any kind on channels that experience interference, which appears to Applicant to be a negative limitation.

Further, regarding functionality, Applicant respectfully holds that Examiner's assertions that "null packets do not initiate any further action versus not transmitting in the channel at all times and therefore is considered equivalent in terms of operational effect" and "the transmission of a null packet is a superfluous addition as there is no indicated functionality gained by said transmission of null packets" are incorrect, for the following reasons.

The operation of a transmitter differs markedly according to whether it uses Applicant's invention or Souissi's invention. This difference enables Applicant's invention to solve at least two problems that Souissi cannot solve, as detailed in Applicants response of 1 March 2006 (pages 2-3), concerning (a) conformance to architectural standards while mitigating interference when a frequency-hopping system is required to visit all of the channels of a predetermined set of channels and (b) moving control of interference mitigation higher into the software stack by controlling the flow of data rather than by controlling the physical-layer operation of the transmitter.

Because Souissi's method cannot solve either of the two problems mentioned above, Applicant respectfully holds that the two methods, i.e., Applicant's method and Souissi's, cannot be equivalent, and that the selective use of null packets as proposed by Applicant is not a superfluous limitation. The transmission of null packets clearly provides additional functionality, as witnessed by its capability to solve two problems that are beyond the reach of Souissi's invention.

Claims 2-11 depend on claim 1. Applicant holds that since claim 1 is patentable, for the reasons given in this paper, so then are claims 2-11. Claims 13-16 depend on claim 12. Applicant holds that since claim 12 is patentable, for the reasons given in this paper, so then are claims 13-16. Claims 18-20 depend on claim 17. Applicant holds that since claim 17 is patentable, for the reasons given in this paper, so then are claims 18-20.

Consequently, Applicant believes that claims 1- 20 are allowable for the reasons given above, and respectfully asks the Conference participants to overturn the final rejections and allow these claims. Applicant sincrcely thanks Examiner and the Conference participants, and requests that the application now pass to issue.

Respectfully submitted,

By: David R. Irvin

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Reg. No. 42,682